

LIST

M A T E R I A L S A F E T Y D A T A S H E E T

Dow Chemical U.S.A. Midland, MI 48674 Emergency Phone: 517-636-4400

MSD: 000974 Page: 1

PRODUCT NAME: DURSBAN (R) 4E INSECTICIDE

Effective Date: 01/19/82 Date Printed: 10/16/85 Product Code: 26006

1. INGREDIENTS:

Chlorpyrifos, (o,o-diethyl o-(3,5,6-trichloro-2-pyridyl) phosphorothioate)	44.4%
Xylene range aromatic solvent	47.7%
Inert ingredients	7.9%

2. PHYSICAL DATA:

BOILING POINT: 290F
VAP PRESS: 49 mmHg @ 40C
VAP DENSITY: >1
SOL. IN WATER: Emulsifies
SP. GRAVITY: 1.079 (68/68F)
CRYSTAL POINT: 10F
APPEARANCE: Yellow liquid.
ODOR: Not available.

3. FIRE AND EXPLOSION HAZARD DATA:

FLASH POINT: 106F, 41C
METHOD USED: TCC

FLAMMABLE LIMITS
LFL: 1.1% @ 75C
UFL: 6.0% @ 150C

EXTINGUISHING MEDIA: Foam, alcohol foam, CO2, dry chemical

FIRE & EXPLOSION HAZARDS: Foam system is preferred because because uncontrolled water can spread possible contamination. Toxic irritating gases may be formed. Rapid decomposition above 160-200C. Violent rupture of containers due to over-pressurization may occur.

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3. FIRE AND EXPLOSION HAZARD DATA: (CONTINUED)

FIRE-FIGHTING EQUIPMENT: Use positive-pressure self-contained air supply.

4. REACTIVITY DATA:

STABILITY: (CONDITIONS TO AVOID) Avoid heating above 500 temperature. Chlorpyrifos undergoes exothermic decomposition which can lead to higher temperatures and violent decomposition if heat developed is not removed. Contains petroleum derivative solvent - will burn.

INCOMPATIBILITY: (SPECIFIC MATERIALS TO AVOID) Base. Consult manufacturer for specific cases.

HAZARDOUS DECOMPOSITION PRODUCTS: Hydrogen chloride, ethyl sulfide, diethyl sulfides and nitrogen oxides.

HAZARDOUS POLYMERIZATION: Will not occur.

5. ENVIRONMENTAL AND DISPOSAL INFORMATION:

ACTION TO TAKE FOR SPILLS/LEAKS: Absorb spills with material such as sand, sawdust, Zorb-all (R), or dirt. Wash exposed body areas thoroughly after handling. Contain spill by diking to keep out of sewers., For large spills, barricade area, eliminate ignition sources, and consult manufacturer.

DISPOSAL METHOD: Dispose of according to local, state and federal regulations. Bury clean-up waste in location away from domestic water supplies.

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6. HEALTH HAZARD DATA:

EYE: May cause moderate irritation and moderate corneal injury, which should heal in 1-2 weeks.

SKIN CONTACT: May cause moderate to severe irritation and, if exposure is severe, may cause superficial burn.

SKIN ABSORPTION: May be absorbed in toxic amounts upon prolonged contact, is moderate in toxicity by this route. LD50 rabbit 1185 mg/kg.

INGESTION: Moderate single dose oral toxicity. LD50 (male rat) 940 mg/kg, (female rat) 530 mg/kg.

INHALATION: ACGIH TLV chlorpyrifos 0.2 mg/m³ 1978.

SYSTEMIC & OTHER EFFECTS: Cholinergic effects (chlorpyrifos) and narcosis (solvents).

7. FIRST AID:

EYES: Irrigate with flowing water immediately and continuously for 15 minutes. Refer to medical personnel.

SKIN: In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Call a physician. Wash clothing before reuse. Destroy contaminated shoes.

INGESTION: Do not induce vomiting. Call a physician and/or transport to emergency facility.

INHALATION: Remove to fresh air if effects occur. Consult medical personnel.

NOTE TO PHYSICIAN:

Eyes: May cause corneal injury or burn. Stain for evidence of corneal injury. If cornea is burned, instill antibiotic steroid preparation frequently. Consult ophthalmologist.

Skin: With prolonged contact - may cause burn; mild contact -

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7. FIRST AID: (CONTINUED)

treat as any contact dermatitis. If burn is present, treat as any thermal burn. May be absorbed in acutely toxic amounts.

Respiratory: No tox data. Solvent content may cause drunkenness. Anesthetic or narcotic effect may occur. Administer oxygen if available. Bronchodilators, expectorants, and antitussives may be of help.

Oral: Moderately toxic. May cause chemical pneumonia if aspirated into lungs. If lavage is performed suggest endotracheal and/or esophagosopic control.

Systemic: May produce organo-phosphorus type cholinesterase inhibition. Atropine, only by injection, is antidote of choice. Oximes may or may not be therapeutic but must never be used in place of atropine. Suggest serum and/or rbc cholinesterase determination. Consult standard literature. Treatment based on sound judgment of physician and individual reactions of patient. May cause reactions similar to petroleum or petroleum-like solvent. May increase myocardial irritability. Avoid epinephrine or similar acting drugs if at all possible.

8. HANDLING PRECAUTIONS:

VENTILATION: Good ventilation and general precautions are usually suitable for most operations.

RESPIRATORY PROTECTION: Approved respiratory protection required in absence of proper environmental control. For emergencies, a positive-pressure breathing apparatus or a full-face respirator is recommended.

SKIN PROTECTION: Clean, body-covering clothing. Wear neoprene rubber gloves when handling.

EYE PROTECTION: Safety glasses. Chemical workers goggles. If spray is possible, eye fountain and safety shower at work area.

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9. ADDITIONAL INFORMATION:

SPECIAL PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE: See label. Keep out of reach of children. Do not swallow. Do not get in eyes or on skin. Avoid breathing mist or vapors. Keep away from heat and open flame. Handle concentrate in ventilated area. Wash thoroughly after handling. Depending on degree of exposure of personnel, consider monitoring blood cholinesterase levels. If in doubt, seek advice of experienced individuals. Keep away from food, feedstuffs and domestic water supplies.

MSDS STATUS: Revised sections 1, 2, 3, 4, 5, 6, 7, and 8.

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